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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 27, 2016

Patrick McCain
Sr. Regulatory Product Manager
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, NC 27419

Subject: Label Amendment – Minor revisions to rate table
Product Name: THX/MXM/FLD/TBZ/SDX FS
EPA Registration Number: 100-1559
Application Date: 2016-March-11
Decision Number: 515740

Dear Mr. McCain:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.


Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, please contact Dee Colby by phone at 703-347-8657, or via email at colby.deanna@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Venus', followed by a horizontal line.

Venus Eagle, Product Manager 01
Invertebrate and Vertebrate Branch 3
Registration Division (7505P)
Office of Pesticide Programs

Enclosure: Stamped label

ACCEPTED

Jun 27, 2016

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 100-1559

(Master label)

THX/MXM/FLD/TBZ/SDX FS

Page 1

GROUP 4A INSECTICIDE

GROUP 1 4 7 12 FUNGICIDES

THX/MXM/FLD/TBZ/SDX FS

Insecticide with Fungicides

A seed treatment product for protection against damage from listed: insects, seed-borne diseases, and seedling diseases on soybean

Active Ingredients:

Thiamethoxam ¹	22.40%
Mefenoxam ²	3.35%
Thiabendazole ³	2.24%
Fludioxonil ⁴	1.12%
Sedaxane ⁵	1.12%
Other Ingredients:	69.77%
Total:	100.00%

¹CAS No. 153719-23-4

²CAS No. 70630-17-0 and CAS No. 69516-34-3

³CAS No. 148-79-8

⁴CAS No. 131341-86-1

⁵CAS No. 874967-67-6

One gallon of THX/MXM/FLD/TBZ/SDX FS contains 2.16 lb thiamethoxam, 0.32 lb mefenoxam, 0.22 Lb thiabendazole, 0.11 lb fludioxonil and 0.11 lb sedaxane.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use in booklet [on label].

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EPA Est.

SCP

Net Contents

FIRST AID	
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves—: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to wildlife, freshwater and estuarine/marine fish and highly toxic to aquatic invertebrates. Runoff may be hazardous to aquatic organisms in neighboring areas. Exposed treated seed may be hazardous to wildlife. Cover seed spilled during loading. Do not contaminate water when disposing of equipment washwater or rinsate.

Pollinator Precautions

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

Groundwater Advisory

Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Mefenoxam is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Physical and Chemical Hazards

Do not use, pour, spill or store near heat or open flame. Do not store near or use with oxidizing agents.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall Syngenta be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For use in commercial seed treatment facilities. Use is also permitted as an end-use seed treatment on agricultural establishments at planting, or immediately before planting, as specified in the Specific Crop Use Directions. This product is to be used in liquid or slurry treaters only.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours. Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils
- Shoes plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT AND/OR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

Treatment of highly mechanically scarred or damaged seed or seed known to be of low vigor and poor quality may result in reduced germination and/or reduction of seed and seedling vigor. Treat a quantity of seed using equipment similar to that planned for treating the total seed lot. Prior to treatment, conduct germination tests on a portion of seed before committing the total seed lot to a selected seed treatment.

Due to seed quality, crop or variety sensitivity, and seed storage conditions beyond the control of Syngenta, no claims are made to guarantee the germination of seed or propagating material for all crop seed when treated with THX/MXM/FLD/TBZ/SDX FS.

USE INFORMATION

THX/MXM/FLD/TBZ/SDX FS is a seed treatment product containing the active ingredients thiamethoxam (insecticide) and fludioxonil, thiabendazole, mefenoxam and sedaxane (fungicides). THX/MXM/FLD/TBZ/SDX FS protects against damage from listed early-season insects, soil-borne and seed-borne diseases of soybeans.

Thiamethoxam is a systemic seed treatment insecticide belonging to the neonicotinoid class of chemistry. Thiamethoxam protects against listed chewing and sucking insects through contact and ingestion.

Mefenoxam fungicide is active against *Pythium*, *Phytophthora* and systemic downy mildew.

Thiabendazole fungicide is active for protection against *Phomopsis* spp. to improve germination and early season seedling health. Thiabendazole also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Fludioxonil fungicide is active against *Fusarium* and *Rhizoctonia*, and suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Sedaxane fungicide is active against seed decay, seedling blight and damping-off caused by *Rhizoctonia* species.

RESISTANCE MANAGEMENT

GROUP 4A INSECTICIDE

THX/MXM/FLD/TBZ/SDX FS contains thiamethoxam, a Group 4A insecticide. Thiamethoxam is a systemic insecticide belonging to the neonicotinoid class of chemistry which includes nicotinic acetylcholine receptor (nAChR) agonists.

Insect populations may contain individuals naturally resistant to Group 4A insecticides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, use sound resistance management strategies established for the crop and use area.

Base seed treatment on an integrated pest management program that includes field sanitation, historical information related to pesticide use, careful selection of pest-tolerant crop varieties, scouting, and management practices which optimize populations of natural enemies of insect pests such as within-field refugia (untreated areas). Sound management programs also consider cultural and biological control practices.

In order to maintain susceptibility to this class of chemistry:

- Use products at their full, specified doses.
- Use appropriate, well-maintained equipment. Use specified water volumes and apply at optimal temperatures in order to obtain optimal treatment.
- When rate ranges are given, use the higher rate within the listed rate range when insect pressure is expected to be high.
- Avoid using a single active ingredient or mode of action (same insecticide group) exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, use a treatment window approach. A treatment window is a period of time defined by the stage of crop development and the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, single or consecutive applications may be made using seed, in-furrow, or foliar treatments unless otherwise excluded by product labels. Do not exceed the maximum amount of this insecticide's mode of action allowed per growing season.
- Following a treatment window of this insecticide's mode of action, rotate to a treatment window of effective products with a different mode of action before making additional applications of this insecticide.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for the crop and use area.

GROUP	1	4	7	12	FUNGICIDES
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THX/MXM/FLD/TBZ/SDX FS contains mefenoxam, a Group 4 fungicide; thiabendazole, a Group 1 fungicide, fludioxonil, a Group 12 fungicide; and sedaxane, a Group 7 fungicide. Thiabendazole belongs to the methyl-benzimidazole carbamate class of chemistry which disrupts β -tubulin assembly in mitosis. Mefenoxam belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Sedaxane is a succinate dehydrogenase inhibitor (SDHI) and belongs to the carboxamide class of chemistry which disrupts cellular respiration and energy generation. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with a MAP/histidine protein kinase in osmotic signal transduction.

Fungal populations may contain individuals naturally resistant to Group 1, 4, 7, and 12 fungicides, and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies such as alternation with fungicides with a different mode of action and/or tank mixes established for the crop and use area.

Use should be based on an IPM program that includes field sanitation, scouting, historical information related to pesticide use, and crop rotation. The IPM program should also consider cultural, biological, and other chemical control practices.

Syngenta encourages responsible product stewardship to ensure effective long term control of the fungal diseases on this label.

For additional information on Insecticide or Fungicide Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local Cooperative Extension Service specialist, pest control advisor, or certified crop advisor
- Visit the Visit the Insecticide Resistance Action Committee (IRAC) on the web at: <http://www.irac-online.org> or the Fungicide Resistance Action Committee (FRAC) on the web at: <http://www.frac.info>

CROP ROTATIONAL RESTRICTIONS

In the event of a crop failure or harvest of a crop grown from THX/MXM/FLD/TBZ/SDX FS treated seed, the field may be replanted according to the following schedule:

Immediate Plantback	Minimum 30-Day Plantback Interval	Minimum 120-Day Plantback Interval
Cereal Grains: Barley, Oats, Rye, Triticale, and Wheat	Alfalfa	All Other Crops
Peas, Dried Shelled: Chickpea (Garbanzo Bean), Field Pea, Lentil, and Pigeon Pea	Brassica (Cole) Leafy Vegetables	
Soybean	Cereal Grains (buckwheat, corn, pearl millet, proso, popcorn, rice (dry-seeded), sorghum, teosinite, wild rice	
	Cotton	
	Cucurbit Vegetables	
	Fruiting Vegetables	
	Globe Artichoke	
	Leafy Vegetables	
	Legume Vegetables (Succulent or Dried)	
	Mint: Peppermint and Spearmint	
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower	
	Peanut	
	Root Vegetables	
	Strawberry	
	Sunflower	
	Tobacco	

For any other crop, the minimum plant back interval is 120 days from the date the THX/MXM/FLD/TBZ/SDX FS treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.

MIXING PROCEDURES

Important: Always re-circulate THX/MXM/FLD/TBZ/SDX FS thoroughly before using.

Consult the manufacturer of the application equipment you plan to use for suitability for this application and for instructions on operation and calibration of the equipment. Follow the manufacturer application instructions for the seed treatment equipment being used.

Use an EPA approved dye/colorant that imparts an unnatural color to the seed as required in 40CFR 153.155(c).

Apply THX/MXM/FLD/TBZ/SDX FS as a water-based slurry utilizing standard slurry or direct inject seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease control. Thoroughly mix the specified amount of THX/MXM/FLD/TBZ/SDX FS into the required amount of water or liquid inoculant for the slurry treater and dilution rate to be used. For direct product inject systems, add the required amount of water or liquid inoculant during application.

Certain crops require addition of inoculants when the seed is treated or planted. THX/MXM/FLD/TBZ/SDX FS is compatible with several liquid inoculant products. Consult the maker of the inoculant product and a Syngenta representative for directions before applying THX/MXM/FLD/TBZ/SDX FS with inoculants.

The total application volume must be sufficient to provide desired level of coverage. Dilution is typically done with water or liquid inoculants. The minimum slurry volume to achieve minimum adequate coverage is 4.0 fluid ounces per 100 pounds of seed assuming an average seed size of 3,000 seeds per pound (slurry volume will vary depending on seed size). More diluent may be required to obtain complete coverage.

Continuous agitation or mixing of the slurry mixture is necessary to prevent settling out of the solution.

Allow seed to dry before bagging or reprocessing directly after treating operation.

Follow planter manufacturer specifications for use of talc or other hopper box additives at planting. Seed must be completely dry before adding to planter.

SEED BAG LABEL REQUIREMENTS

The Federal Seed Act requires that bags containing treated seeds shall be labeled with the following statements:

- This seed has been treated with thiamethoxam insecticide and fludioxonil, mefenoxam, thiabendazole and sedaxane fungicides.
- Do not use for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with THX/MXM/FLD/TBZ/SDX FS:

- **Ground Water Advisory:**
Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.
- **Pollinator Precautions:**
Thiamethoxam is highly toxic to bees, and effects are possible as a result of exposure to translocated residues in blooming crops.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in the ethanol by-products that are used in agronomic practice.
- Do not allow children, pets, or livestock to have access to treated seed.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Dispose of all excess treated seed. Leftover treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Dispose of seed packaging in accordance with local requirements.
- Do not graze or feed livestock on treated areas for 45 days after planting seed treated with THX/MXM/FLD/TBZ/SDX FS.

- In the event of a crop failure or harvest of a crop grown from THX/MXM/FLD/TBZ/SDX FS treated seed, the field may be replanted according to the following schedule.

Immediate Plantback	Minimum 30-Day Plantback Interval	Minimum 120-Day Plantback Interval
Cereal Grains: Barley, Oats, Rye, Triticale, and Wheat	Alfalfa	All Other Crops
Peas, Dried Shelled: Chickpea (Garbanzo Bean), Field Pea, Lentil, and Pigeon Pea	Brassica (Cole) Leafy Vegetables	
Soybean	Cereal Grains (buckwheat, corn, pearl millet, proso, popcorn, rice (dry-seeded), sorghum, teosinte, wild rice	
	Cotton	
	Cucurbit Vegetables	
	Fruiting Vegetables	
	Globe Artichoke	
	Leafy Vegetables	
	Legume Vegetables (Succulent or Dried)	
	Mint: Peppermint and Spearmint	
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower	
	Peanut	
	Root Vegetables	
	Strawberry	
	Sunflower	
	Tobacco	

- For any other crop, the minimum plant back interval is 120 days from the date the THX/MXM/FLD/TBZ/SDX FS treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.
- Do not use at a rate that will result in more than 0.083 lb thiamethoxam (37.8 grams ai/A) per acre, 0.004 lb fludioxonil (2.0 grams ai/A) per acre and 0.013 lb mefenoxam (5.7 grams ai/A) per acre per calendar year as a seed treatment application.
- This seed has been treated with 0.0756 mg ai thiamethoxam, 0.0113 mg mefenoxam, and 0.0038 mg fludioxonil per seed.

- Do not use more than 0.266 lb ai/A of thiamethoxam per calendar year, including all thiamethoxam products and application methods (for example, seed treatment, in-furrow, and foliar).
- Do not apply a neonicotinoid insecticide within 45 days of planting seed treated with THX/MXM/FLD/TBZ/SDX FS.

CROP USE DIRECTIONS

When applied according to the **THX/MXM/FLD/TBZ/SDX FS RATE TABLE**, THX/MXM/FLD/TBZ/SDX FS provides early season protection against injury by aphids, bean leaf beetle, grape colaspis, leaf miners, leaf hoppers, Mexican bean beetle, seed corn maggot, three-cornered alfalfa hopper, thrips, white grubs, and wireworm.

THX/MXM/FLD/TBZ/SDX FS provides protection against damping-off and seed borne rots due to *Pythium*, *Phytophthora*, *Fusarium*, *Rhizoctonia* species and early season *Phytophthora* root rot. THX/MXM/FLD/TBZ/SDX FS also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

THX/MXM/FLD/TBZ/SDX FS Rate Table¹

Crop	Rate of THX/MXM/FLD/TBZ/SDX FS		
	fl oz per 100 lb seed or fl oz per 140,000 seeds	grams ai per 100 kg seed	mg ai per seed
Soybean, including soybean, vegetable	2.96 fl oz or 1.38 fl oz per 140,000 seeds	Thiamethoxam 50 g Mefenoxam 7.5 g Thiabendazole 5.0 g Fludioxonil 2.5 g Sedaxane 2.5 g	Total = 0.102

¹The mg ai per seed and fl oz THX/MXM/FLD/TBZ/SDX FS per 100 lb seed rates are based on 3,000 seeds per pound.

USE RESTRICTIONS

- Do not allow children, pets, or livestock to have access to treated seed.
- Do not graze or feed livestock on treated areas for 45 days after planting seed treated with THX/MXM/FLD/TBZ/SDX FS.
- Do not use at a rate that will result in more than 0.083 lb thiamethoxam (37.8 grams ai/A) per acre, 0.004 lb fludioxonil (2.0 grams ai/A) per acre and 0.013 lb mefenoxam (5.7 grams ai/A) per acre per calendar year as a seed treatment application.

- This seed has been treated with 0.0756 mg ai thiamethoxam, 0.0113 mg mefenoxam, and 0.0038 mg fludioxonil per seed.
- Do not use more than 0.266 lb ai/A of thiamethoxam per calendar year, including all thiamethoxam products and application methods (for example, seed treatment, in-furrow, and foliar).
- Do not apply a neonicotinoid insecticide within 45 days of planting seed treated with THX/MXM/FLD/TBZ/SDX FS.

STORED GRAIN PROTECTION

When treated according to the directions for post-planting protection against listed pests, THX/MXM/FLD/TBZ/SDX FS will also provide protection during post treatment storage of the soybean seed against damage from the following stored grain insects: Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryza*), Red Flour Beetle (*Tribolium castaneum*), and Lesser Grain Borer (*Rhizopertha dominica*).

If the soybean seed to be treated has existing infestations of stored grain insects, fumigate the seed with a registered product approved for such use prior to treating with THX/MXM/FLD/TBZ/SDX FS and bagging.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, or disposal, or cleaning of equipment.

Pesticide Storage

Store in a cool, dry place. Storage for extended periods above 90°F is not recommended.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling [less than or equal to 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

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Manufactured for:
Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300

THX-MXM-FLD-TBZ-SDX FS 1559 MAS 1015 AMEND-C MAR2016 CLEAN – rk – 06-3-16
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(Master label)

GROUP 4A INSECTICIDE

GROUP 1 4 7 12 FUNGICIDES

THX/MXM/FLD/TBZ/SDX FS

Insecticide with Fungicides

A seed treatment product for protection against damage from listed insects, seed-borne diseases, and seedling diseases on soybean

Active Ingredients:

Thiamethoxam ¹	22.40%
Mefenoxam ²	3.35%
Thiabendazole ³	2.24%
Fludioxonil ⁴	1.12%
Sedaxane ⁵	1.12%
Other Ingredients:	69.77%
Total:	100.00%

¹CAS No. 153719-23-4

²CAS No. 70630-17-0 and CAS No. 69516-34-3

³CAS No. 148-79-8

⁴CAS No. 131341-86-1

⁵CAS No. 874967-67-6

One gallon of THX/MXM/FLD/TBZ/SDX FS contains 2.16 lb thiamethoxam, 0.32 lb mefenoxam, 0.22 Lb thiabendazole, 0.11 lb fludioxonil and 0.11 lb sedaxane.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use in booklet [on label].

EPA Reg. No. 100-1559

EPA Est.

SCP

Net Contents

DOCUMENTUM

FIRST AID	
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves—: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to wildlife, freshwater and estuarine/marine fish and highly toxic to aquatic invertebrates. Runoff may be hazardous to aquatic organisms in neighboring areas. Exposed treated seed may be hazardous to wildlife. Cover seed spilled during loading. Do not contaminate water when disposing of equipment washwater or rinsate.

Pollinator Precautions

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

Groundwater Advisory

Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Mefenoxam is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Physical and Chemical Hazards

Do not use, pour, spill or store near heat or open flame. Do not store near or use with oxidizing agents.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall Syngenta be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For use in commercial seed treatment facilities. Use is also permitted as an end-use seed treatment on agricultural establishments at planting, or immediately before planting, as specified in the Specific Crop Use Directions. This product is to be used in liquid or slurry treaters only.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours. Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Shoes plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT AND/OR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

Treatment of highly mechanically scarred or damaged seed or seed known to be of low vigor and poor quality may result in reduced germination and/or reduction of seed and seedling vigor. Treat a quantity of seed using equipment similar to that planned for treating the total seed lot. Prior to treatment, conduct germination tests on a portion of seed before committing the total seed lot to a selected seed treatment.

Due to seed quality, crop or variety sensitivity, and seed storage conditions beyond the control of Syngenta, no claims are made to guarantee the germination of seed or propagating material for all crop seed when treated with THX/MXM/FLD/TBZ/SDX FS.

USE INFORMATION

THX/MXM/FLD/TBZ/SDX FS is a seed treatment product containing the active ingredients thiamethoxam (insecticide) and fludioxonil, thiabendazole, mefenoxam and sedaxane (fungicides). THX/MXM/FLD/TBZ/SDX FS protects against damage from listed early-season insects, soil-borne and seed-borne diseases of soybeans.

Thiamethoxam is a systemic seed treatment insecticide belonging to the neonicotinoid class of chemistry. Thiamethoxam protects against listed chewing and sucking insects through contact and ingestion.

Mefenoxam fungicide is active against *Pythium*, *Phytophthora* and systemic downy mildew.

Thiabendazole fungicide is active for protection against phomopsis spp. to improve germination and early season seedling health. Thiabendazole also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Fludioxonil fungicide is active against *Fusarium* and *Rhizoctonia*, and suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Sedaxane fungicide is active against seed decay, seedling blight and damping-off caused by *Rhizoctonia* species.

RESISTANCE MANAGEMENT

GROUP 4A INSECTICIDE

THX/MXM/FLD/TBZ/SDX FS contains thiamethoxam, a Group 4A insecticide. Thiamethoxam is a systemic insecticide belonging to the neonicotinoid class of chemistry which includes nicotinic acetylcholine receptor (nAChR) agonists.

Insect populations may contain individuals naturally resistant to Group 4A insecticides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, use sound resistance management strategies established for the crop and use area.

Base seed treatment on an integrated pest management program that includes field sanitation, historical information related to pesticide use, careful selection of pest-tolerant crop varieties, scouting, and management practices which optimize populations of natural enemies of insect pests such as within-field refugia (untreated areas). Sound management programs also consider cultural and biological control practices.

In order to maintain susceptibility to this class of chemistry:

- Use products at their full, recommended doses.
- Use appropriate, well-maintained equipment. Use recommended water volumes and apply at optimal temperatures in order to obtain optimal treatment.
- When rate ranges are given, use the higher rate within the listed rate range when insect pressure is expected to be high.
- Avoid using a single active ingredient or mode of action (same insecticide group) exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, use a treatment window approach. A treatment window is a period of time defined by the stage of crop development and the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, single or consecutive applications may be made using seed, in-furrow, or foliar treatments unless otherwise excluded by product labels. Do not exceed the maximum amount of this insecticide's mode of action allowed per growing season.
- Following a treatment window of this insecticide's mode of action, rotate to a treatment window of effective products with a different mode of action before making additional applications of this insecticide.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for the crop and use area.

GROUP 1 4 7 12 FUNGICIDES

THX/MXM/FLD/TBZ/SDX FS contains mefenoxam, a Group 4 fungicide; thiabendazole, a Group 1 fungicide, fludioxonil, a Group 12 fungicide; and sedaxane, a Group 7 fungicide. Thiabendazole belongs to the methyl-benzimidazole carbamate class of chemistry which disrupts β -tubulin assembly in mitosis. Mefenoxam belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Sedaxane is a succinate dehydrogenase inhibitor (SDHI) and belongs to the carboxamide class of chemistry which disrupts cellular respiration and energy generation. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with a MAP/histidine protein kinase in osmotic signal transduction.

Fungal populations may contain individuals naturally resistant to Group 1, 4, 7, and 12 fungicides, and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies such as alternation with fungicides with a different mode of action and/or tank mixes established for the crop and use area.

Use should be based on an IPM program that includes field sanitation, scouting, historical information related to pesticide use, and crop rotation. The IPM program should also consider cultural, biological, and other chemical control practices.

Syngenta encourages responsible product stewardship to ensure effective long term control of the fungal diseases on this label.

For additional information on Insecticide or Fungicide Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local Cooperative Extension Service specialist, pest control advisor, or certified crop advisor
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at: <http://www.irac-online.org> or the Fungicide Resistance Action Committee (FRAC) on the web at: <http://www.frac.info>

CROP ROTATIONAL RESTRICTIONS

In the event of a crop failure or harvest of a crop grown from THX/MXM/FLD/TBZ/SDX FS treated seed, the field may be replanted according to the following schedule:

Immediate Plantback	Minimum 30-Day Plantback Interval	Minimum 120-Day Plantback Interval
Cereal Grains: Barley, Oats, Rye, Triticale, and Wheat	Alfalfa	All Other Crops
Peas, Dried Shelled: Chickpea (Garbanzo Bean), Field Pea, Lentil, and Pigeon Pea	Brassica (Cole) Leafy Vegetables	
Soybean	Cereal Grains (buckwheat, corn, pearl millet, proso, popcorn, rice (dry-seeded), sorghum, teosinite, wild rice	
	Cotton	
	Cucurbit Vegetables	
	Fruiting Vegetables	
	Globe Artichoke	
	Leafy Vegetables	
	Legume Vegetables (Succulent or Dried)	
	Mint: Peppermint and Spearmint	
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower	
	Peanut	
	Root Vegetables	
	Strawberry	
	Sunflower	
	Tobacco	

For any other crop, the minimum plant back interval is 120 days from the date the THX/MXM/FLD/TBZ/SDX FS treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.

MIXING PROCEDURES

Important: Always re-circulate THX/MXM/FLD/TBZ/SDX FS thoroughly before using.

Consult the manufacturer of the application equipment you plan to use for suitability for this application and for instructions on operation and calibration of the equipment. Follow the manufacturer application instructions for the seed treatment equipment being used.

Use an EPA approved dye/colorant that imparts an unnatural color to the seed as required in 40CFR 153.155(c).

Apply THX/MXM/FLD/TBZ/SDX FS as a water-based slurry utilizing standard slurry or direct inject seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease control. Thoroughly mix the specified amount of THX/MXM/FLD/TBZ/SDX FS into the required amount of water or liquid inoculant for the slurry treater and dilution rate to be used. For direct product inject systems, add the required amount of water or liquid inoculant during application.

Certain crops require addition of inoculants when the seed is treated or planted. THX/MXM/FLD/TBZ/SDX FS is compatible with several liquid inoculant products. Consult the maker of the inoculant product and a Syngenta representative for directions before applying THX/MXM/FLD/TBZ/SDX FS with inoculants.

The total application volume must be sufficient to provide desired level of coverage. Dilution is typically done with water or liquid inoculants. The minimum slurry volume to achieve minimum adequate coverage is 4.0 fluid ounces per 100 pounds of seed assuming an average seed size of 3,000 seeds per pound (slurry volume will vary depending on seed size). More diluent may be required to obtain complete coverage.

Continuous agitation or mixing of the slurry mixture is necessary to prevent settling out of the solution.

Allow seed to dry before bagging or reprocessing directly after treating operation.

Follow planter manufacturer specifications for use of talc or other hopper box additives at planting. Seed must be completely dry before adding to planter.

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SEED BAG LABEL REQUIREMENTS

The Federal Seed Act requires that bags containing treated seeds shall be labeled with the following statements:

- This seed has been treated with thiamethoxam insecticide and fludioxonil, mefenoxam, thiabendazole and sedaxane fungicides.
- Do not use for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with THX/MXM/FLD/TBZ/SDX FS:

- Ground Water Advisory:
Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.
- Pollinator Precautions:
Thiamethoxam is highly toxic to bees, and effects are possible as a result of exposure to translocated residues in blooming crops.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in the ethanol by-products that are used in agronomic practice.
- • Do not allow children, pets, or livestock to have access to treated seed.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Dispose of all excess treated seed. Leftover treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Dispose of seed packaging in accordance with local requirements.
- • Do not graze or feed livestock on treated areas for 45 days after planting seed treated with THX/MXM/FLD/TBZ/SDX FS.

CROP USE DIRECTIONS

When applied according to the THX/MXM/FLD/TBZ/SDX FS RATE TABLE, THX/MXM/FLD/TBZ/SDX FS provides early season protection against injury by aphids, bean leaf beetle, grape colaspis, leaf miners, leaf hoppers, Mexican bean beetle, seed corn maggot, three-cornered alfalfa hopper, thrips, white grubs, and wireworm.

THX/MXM/FLD/TBZ/SDX FS provides protection against damping-off and seed borne rots due to *Pythium*, *Phytophthora*, *Fusarium*, *Rhizoctonia* species and early season *Phytophthora* root rot. THX/MXM/FLD/TBZ/SDX FS also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

THX/MXM/FLD/TBZ/SDX FS Rate Table¹

Crop	Rate of THX/MXM/FLD/TBZ/SDX FS		
	fl oz per 100 lb seed or fl oz per 140,000 seeds	grams ai per 100 kg seed	mg ai per seed
Soybean, including soybean, vegetable	2.96 fl oz or 1.38 fl oz per 140,000 seeds	Thiamethoxam 50 g Mefenoxam 7.5 g Thiabendazole 5.0 g Fludioxonil 2.5 g Sedaxane 2.5 g	Total = 0.102

¹The mg ai per seed and fl oz THX/MXM/FLD/TBZ/SDX FS per 100 lb seed rates are based on 3,000 seeds per pound.

STORED GRAIN PROTECTION

When treated according to the directions for post-planting protection against listed pests, THX/MXM/FLD/TBZ/SDX FS will also provide protection during post treatment storage of the soybean seed against damage from the following stored grain insects: Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryza*), Red Flour Beetle (*Tribolium castaneum*), and Lesser Grain Borer (*Rhizopertha dominica*).

If the soybean seed to be treated has existing infestations of stored grain insects, fumigate the seed with a registered product approved for such use prior to treating with THX/MXM/FLD/TBZ/SDX FS and bagging.

- In the event of a crop failure or harvest of a crop grown from THX/MXM/FLD/TBZ/SDX FS treated seed, the field may be replanted according to the following schedule.

Immediate Plantback	Minimum 30-Day Plantback Interval	Minimum 120-Day Plantback Interval
Cereal Grains: Barley, Oats, Rye, Triticale, and Wheat	Alfalfa	All Other Crops
Peas, Dried Shelled: Chickpea (Garbanzo Bean), Field Pea, Lentil, and Pigeon Pea	Brassica (Cole) Leafy Vegetables	
Soybean	Cereal Grains (buckwheat, corn, pearl millet, proso, popcorn, rice (dry-seeded), sorghum, teosinte, wild rice	
	Cotton	
	Cucurbit Vegetables	
	Fruiting Vegetables	
	Globe Artichoke	
	Leafy Vegetables	
	Legume Vegetables (Succulent or Dried)	
	Mint: Peppermint and Spearmint	
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower	
	Peanut	
	Root Vegetables	
	Strawberry	
	Sunflower	
	Tobacco	

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- For any other crop, the minimum plant back interval is 120 days from the date the THX/MXM/FLD/TBZ/SDX FS treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.
- Do not use at a rate that will result in more than 0.083 lb thiamethoxam (37.8 grams ai/A) per acre, 0.004 lb fludioxonil (2.0 grams ai/A) per acre and 0.013 lb mefenoxam (5.7 grams ai/A) per acre per calendar year as a seed treatment application.
- This seed has been treated with 0.0756 mg ai thiamethoxam, 0.0113 mg mefenoxam, and 0.0038 mg fludioxonil per seed.
- Do not apply a neonicotinoid insecticide within 45 days of planting seed treated with THX/MXM/FLD/TBZ/SDX.

Insert blue sticky info above.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, or disposal, or cleaning of equipment.

Pesticide Storage

Store in a cool, dry place. Storage for extended periods above 90°F is not recommended.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling [less than or equal to 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more

times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

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Manufactured for:
Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300

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Non-det. label
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- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to wildlife, freshwater and estuarine/marine fish and highly toxic to aquatic invertebrates. Runoff may be hazardous to aquatic organisms in neighboring areas. Exposed treated seed may be hazardous to wildlife. Cover seed spilled during loading. Do not contaminate water when disposing of equipment washwater or rinsate.

Pollinator Precautions

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

Groundwater Advisory

Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Mefenoxam is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Physical and Chemical Hazards

Do not use, pour, spill or store near heat or open flame. Do not store near or use with oxidizing agents.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall Syngenta be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For use in commercial seed treatment facilities. Use is also permitted as an end-use seed treatment on agricultural establishments at planting, or immediately before planting, as specified in the Specific Crop Use Directions. This product is to be used in liquid or slurry treaters only.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours. Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Shoes plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT AND/OR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

Treatment of highly mechanically scarred or damaged seed or seed known to be of low vigor and poor quality may result in reduced germination and/or reduction of seed and seedling vigor. Treat a quantity of seed using equipment similar to that planned for treating the total seed lot. Prior to treatment, conduct germination tests on a portion of seed before committing the total seed lot to a selected seed treatment.

Due to seed quality, crop or variety sensitivity, and seed storage conditions beyond the control of Syngenta, no claims are made to guarantee the germination of seed or propagating material for all crop seed when treated with THX/MXM/FLD/TBZ/SDX FS.

USE INFORMATION

THX/MXM/FLD/TBZ/SDX FS is a seed treatment product containing the active ingredients thiamethoxam (insecticide) and fludioxonil, thiabendazole, mefenoxam and sedaxane (fungicides). THX/MXM/FLD/TBZ/SDX FS protects against damage from listed early-season insects, soil-borne and seed-borne diseases of soybeans.

Thiamethoxam is a systemic seed treatment insecticide belonging to the neonicotinoid class of chemistry. Thiamethoxam protects against listed chewing and sucking insects through contact and ingestion.

Mefenoxam fungicide is active against *Pythium*, *Phytophthora* and systemic downy mildew.

Thiabendazole fungicide is active for protection against phomopsis spp. to improve germination and early season seedling health. Thiabendazole also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Fludioxonil fungicide is active against *Fusarium* and *Rhizoctonia*, and suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Sedaxane fungicide is active against seed decay, seedling blight and damping-off caused by *Rhizoctonia* species.

RESISTANCE MANAGEMENT

GROUP 4A INSECTICIDE

THX/MXM/FLD/TBZ/SDX FS contains thiamethoxam, a Group 4A insecticide. Thiamethoxam is a systemic insecticide belonging to the neonicotinoid class of chemistry which includes nicotinic acetylcholine receptor (nAChR) agonists.

Insect populations may contain individuals naturally resistant to Group 4A insecticides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, use sound resistance management strategies established for the crop and use area.

Base seed treatment on an integrated pest management program that includes field sanitation, historical information related to pesticide use, careful selection of pest-tolerant crop varieties, scouting, and management practices which optimize populations of natural enemies of insect pests such as within-field refugia (untreated areas). Sound management programs also consider cultural and biological control practices.

Specified

In order to maintain susceptibility to this class of chemistry:

- Use products at their full, recommended doses. *specified?*
- Use appropriate, well-maintained equipment. Use recommended water volumes and apply at optimal temperatures in order to obtain optimal treatment.
- When rate ranges are given, use the higher rate within the listed rate range when insect pressure is expected to be high.
- Avoid using a single active ingredient or mode of action (same insecticide group) exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, use a treatment window approach. A treatment window is a period of time defined by the stage of crop development and the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, single or consecutive applications may be made using seed, in-furrow, or foliar treatments unless otherwise excluded by product labels. Do not exceed the maximum amount of this insecticide's mode of action allowed per growing season.
- Following a treatment window of this insecticide's mode of action, rotate to a treatment window of effective products with a different mode of action before making additional applications of this insecticide.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for the crop and use area.

GROUP	1	4	7	12	FUNGICIDES
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THX/MXM/FLD/TBZ/SDX FS contains mefenoxam, a Group 4 fungicide; thiabendazole, a Group 1 fungicide, fludioxonil, a Group 12 fungicide; and sedaxane, a Group 7 fungicide. Thiabendazole belongs to the methyl-benzimidazole carbamate class of chemistry which disrupts β -tubulin assembly in mitosis. Mefenoxam belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Sedaxane is a succinate dehydrogenase inhibitor (SDHI) and belongs to the carboxamide class of chemistry which disrupts cellular respiration and energy generation. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with a MAP/histidine protein kinase in osmotic signal transduction.

Fungal populations may contain individuals naturally resistant to Group 1, 4, 7, and 12 fungicides, and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies such as alternation with fungicides with a different mode of action and/or tank mixes established for the crop and use area.

Use should be based on an IPM program that includes field sanitation, scouting, historical information related to pesticide use, and crop rotation. The IPM program should also consider cultural, biological, and other chemical control practices.

Syngenta encourages responsible product stewardship to ensure effective long term control of the fungal diseases on this label.

For additional information on Insecticide or Fungicide Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local Cooperative Extension Service specialist, pest control advisor, or certified crop advisor
- Visit the Visit the Insecticide Resistance Action Committee (IRAC) on the web at: <http://www.irac-online.org> or the Fungicide Resistance Action Committee (FRAC) on the web at: <http://www.frac.info>

CROP ROTATIONAL RESTRICTIONS

In the event of a crop failure or harvest of a crop grown from THX/MXM/FLD/TBZ/SDX FS treated seed, the field may be replanted according to the following schedule:

Immediate Plantback	Minimum 30-Day Plantback Interval	Minimum 120-Day Plantback Interval
Cereal Grains: Barley, Oats, Rye, Triticale, and Wheat	Alfalfa	All Other Crops
Peas, Dried Shelled: Chickpea (Garbanzo Bean), Field Pea, Lentil, and Pigeon Pea	Brassica (Cole) Leafy Vegetables	
Soybean	Cereal Grains (buckwheat, corn, pearl millet, proso, popcorn, rice (dry-seeded), sorghum, teosinite, wild rice	
	Cotton	
	Cucurbit Vegetables	
	Fruiting Vegetables	
	Globe Artichoke	
	Leafy Vegetables	
	Legume Vegetables (Succulent or Dried)	
	Mint: Peppermint and Spearmint	
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower	
	Peanut	
	Root Vegetables	
	Strawberry	
	Sunflower	
	Tobacco	

For any other crop, the minimum plant back interval is 120 days from the date the THX/MXM/FLD/TBZ/SDX FS treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.

MIXING PROCEDURES

Important: Always re-circulate THX/MXM/FLD/TBZ/SDX FS thoroughly before using.

Consult the manufacturer of the application equipment you plan to use for suitability for this application and for instructions on operation and calibration of the equipment. Follow the manufacturer application instructions for the seed treatment equipment being used.

Use an EPA approved dye/colorant that imparts an unnatural color to the seed as required in 40CFR 153.155(c).

Apply THX/MXM/FLD/TBZ/SDX FS as a water-based slurry utilizing standard slurry or direct inject seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease control. Thoroughly mix the specified amount of THX/MXM/FLD/TBZ/SDX FS into the required amount of water or liquid inoculant for the slurry treater and dilution rate to be used. For direct product inject systems, add the required amount of water or liquid inoculant during application.

Certain crops require addition of inoculants when the seed is treated or planted. THX/MXM/FLD/TBZ/SDX FS is compatible with several liquid inoculant products. Consult the maker of the inoculant product and a Syngenta representative for directions before applying THX/MXM/FLD/TBZ/SDX FS with inoculants.

The total application volume must be sufficient to provide desired level of coverage. Dilution is typically done with water or liquid inoculants. The minimum slurry volume to achieve minimum adequate coverage is 4.0 fluid ounces per 100 pounds of seed assuming an average seed size of 3,000 seeds per pound (slurry volume will vary depending on seed size). More diluent may be required to obtain complete coverage.

Continuous agitation or mixing of the slurry mixture is necessary to prevent settling out of the solution.

Allow seed to dry before bagging or reprocessing directly after treating operation.

Follow planter manufacturer specifications for use of talc or other hopper box additives at planting. Seed must be completely dry before adding to planter.

SEED BAG LABEL REQUIREMENTS

The Federal Seed Act requires that bags containing treated seeds shall be labeled with the following statements:

- This seed has been treated with thiamethoxam insecticide and fludioxonil, mefenoxam, thiabendazole and sedaxane fungicides.
- Do not use for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with THX/MXM/FLD/TBZ/SDX FS:

- **Ground Water Advisory:**
Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.
- **Pollinator Precautions:**
Thiamethoxam is highly toxic to bees, and effects are possible as a result of exposure to translocated residues in blooming crops.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in the ethanol by-products that are used in agronomic practice.
- Do not allow children, pets, or livestock to have access to treated seed.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Dispose of all excess treated seed. Leftover treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Dispose of seed packaging in accordance with local requirements.
- Do not graze or feed livestock on treated areas for 45 days after planting seed treated with THX/MXM/FLD/TBZ/SDX FS.

- In the event of a crop failure or harvest of a crop grown from THX/MXM/FLD/TBZ/SDX FS treated seed, the field may be replanted according to the following schedule.

Immediate Plantback	Minimum 30-Day Plantback Interval	Minimum 120-Day Plantback Interval
Cereal Grains: Barley, Oats, Rye, Triticale, and Wheat	Alfalfa	All Other Crops
Peas, Dried Shelled: Chickpea (Garbanzo Bean), Field Pea, Lentil, and Pigeon Pea	Brassica (Cole) Leafy Vegetables	
Soybean	Cereal Grains (buckwheat, corn, pearl millet, proso, popcorn, rice (dry-seeded), sorghum, teosinte, wild rice	
	Cotton	
	Cucurbit Vegetables	
	Fruiting Vegetables	
	Globe Artichoke	
	Leafy Vegetables	
	Legume Vegetables (Succulent or Dried)	
	Mint: Peppermint and Spearmint	
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower	
	Peanut	
	Root Vegetables	
	Strawberry	
	Sunflower	
	Tobacco	

- For any other crop, the minimum plant back interval is 120 days from the date the THX/MXM/FLD/TBZ/SDX FS treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.
- Do not use at a rate that will result in more than 0.083 lb thiamethoxam (37.8 grams ai/A) per acre, 0.004 lb fludioxonil (2.0 grams ai/A) per acre and 0.013 lb mefenoxam (5.7 grams ai/A) per acre per calendar year as a seed treatment application.
- This seed has been treated with 0.0756 mg ai thiamethoxam, 0.0113 mg mefenoxam, and 0.0038 mg fludioxonil per seed.
- Do not apply a neonicotinoid insecticide within 45 days of planting seed treated with THX/MXM/FLD/TBZ/SDX.

CROP USE DIRECTIONS

When applied according to the **THX/MXM/FLD/TBZ/SDX FS RATE TABLE**, THX/MXM/FLD/TBZ/SDX FS provides early season protection against injury by aphids, bean leaf beetle, grape colaspis, leaf miners, leaf hoppers, Mexican bean beetle, seed corn maggot, three-cornered alfalfa hopper, thrips, white grubs, and wireworm.

THX/MXM/FLD/TBZ/SDX FS provides protection against damping-off and seed borne rots due to *Pythium*, *Phytophthora*, *Fusarium*, *Rhizoctonia* species and early season *Phytophthora* root rot. THX/MXM/FLD/TBZ/SDX FS also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

THX/MXM/FLD/TBZ/SDX FS Rate Table¹

Crop	Rate of THX/MXM/FLD/TBZ/SDX FS		
	fl oz per 100 lb seed or fl oz per 140,000 seeds	grams ai per 100 kg seed	mg ai per seed
Soybean, including soybean, vegetable	2.96 fl oz or 1.38 fl oz per 140,000 seeds	Thiamethoxam 50 g/m Mefenoxam 7.5 g/m Thiabendazole 5.0 g/m Fludioxonil 2.5 g/m Sedaxane 2.5 g/m	Total = 0.102

¹The mg ai per seed and fl oz THX/MXM/FLD/TBZ/SDX FS per 100 lb seed rates are based on 3,000 seeds per pound.

STORED GRAIN PROTECTION

When treated according to the directions for post-planting protection against listed pests, THX/MXM/FLD/TBZ/SDX FS will also provide protection during post treatment storage of the soybean seed against damage from the following stored grain insects: Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryza*), Red Flour Beetle (*Tribolium castaneum*), and Lesser Grain Borer (*Rhizopertha dominica*).

If the soybean seed to be treated has existing infestations of stored grain insects, fumigate the seed with a registered product approved for such use prior to treating with THX/MXM/FLD/TBZ/SDX FS and bagging.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, or disposal, or cleaning of equipment.

Pesticide Storage

Store in a cool, dry place. Storage for extended periods above 90°F is not recommended.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling [less than or equal to 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more

times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

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Manufactured for:
Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300

THX-MXM-FLD-TBZ-SDX FS 1559 MAS 1015 AMEND MAR2016 HILITE – rk – 03-09-16
00100-01559.20160310.THX-MXM-FLD-TBZ-SDX-AMEND-MAR16-HI.PDF

May 31, 2016 Telephone conversation with Matt Flannery (336-632-6395) 10:30 a.m. concerning label revision for 100-1559. I let him know that I would speak to Venus about their concerns. My conversation with Venus was shortly after the conversation with Matt.

p. 1 stating listed 3x sounds "legalistic and overbearing" ...would prefer to say 'listed insects, seed-borne diseases, and seedling diseases on soybean' Venus agreed to add a (:) in place of listed 3 times

p. 3 Pollinator Precautions – concern having to add the additional paragraph, "Ensure that planting equipment..."

We already asked them to add "Thiamethoxam is highly toxic to bees..."

Too much like the Imidacloprid label; they are concerned that they are adding Bayer's language to their label but Bayer does not have to add the "Ensure that planting..." to Bayer's label. Want to be sure that there is uniformity across the board, particularly since there is no demonstrated toxicity driving this labeling. Venus would like them to add the statement for good stewardship; however, she agreed that it could be at their discretion

p. 11 Seed Bag Tag and inclusion of max rate bullet

History: Crop Life had meeting to address seed bag tag...label too long for most seed bags; before finishing, NGOs sued EPA over pollinators and seed treatment USDA/EPA, so seed tag language on hold, but the gist of what they were hoping for was that the max seed rate would go on the seed label and the overall max rate would go on the foliar label because the grower would be concerned with maxing out on foliar applications only; therefore, to reduce the number of bullets, put max rate on foliar and not seed. Venus would not change her mind on this...the bullet for max rate per calendar year should be included

p. 12 Use Restrictions

duplication from seed bag tag; doesn't add useful information for the grower and seed treater won't use this info Venus reminded me that the Seed Bag Tag is not enforceable; the label is...the farmer who treats his own seed may never see or bag his seed and therefore he/she wouldn't read the seed bag tag

Colby, Deanna

From: Colby, Deanna
Sent: Tuesday, May 31, 2016 12:55 PM
To: 'Flanery Matt USGR'
Cc: 'McCain Patrick USGR'
Subject: 100-1559
Attachments: 100-1559 20160531 THX-MXM-FLD-TBZ-SDX-AMEND-B-MAR16_DC.pdf

Hi Matt,

I met with Venus this morning shortly after our telephone conversation. The comments below are from the outcome of that discussion. Please see the attached label for specific changes.

- 1) Label p. 1: remove additional 'listed' and add a colon, to read, "A seed treatment product for protection against damage from listed: insects, seed-borne diseases, and seedling diseases on soybean"
- 2) Label p. 3 and 10: Venus would like you to consider adding the statement, "Ensure that planting equipment is functioning properly in accordance with manufacturing specifications to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds" to inform the farmer of good stewardship practices...this will be at your discretion.
- 3) Label p. 11: The bullet for maximum rate of thiamethoxam per calendar year should be included.
- 4) Label p. 12: The addition of Use Restrictions should be included on the label even though the same information appears on the Seed Bag Tag. Information as it appears on the label is enforceable; currently, this is not true for the Seed Bag Tag.

I hope this helps to proceed towards concluding your amendment submission. Please send back highlighted and clean versions of the corrected label. If you have any questions, please feel free to contact me via phone or email.

Deanna (Dee) Colby, Ph.D.
Entomologist, EPA
Invertebrate & Vertebrate Branch 3
Registration Division
703-347-8657

Colby, Deanna

From: Colby, Deanna
Sent: Wednesday, April 06, 2016 10:26 AM
To: 'patrick.mccain@syngenta.com'
Subject: 100-1559 amendment

Good Morning Mr. McCain,

Venus wanted me to introduce myself. I'm an entomologist working on Venus and Mark Suarez's teams in RD. I was looking over your label amendment for EPA Reg. #100-1559 and had a couple of minor corrections (per Venus) and a question for you.

- 1) The last stamped label on file has a (Master label) and a (Non-detachable Container label). The labels included with the amendment application have (Master label) as a heading for both and no (Non-detachable Container label). If this is in error, please correct the headings to match the label on file.
- 2) Venus would like you to change 'recommended' doses to 'specified' doses (p. 7, 1st bullet, each label).
- 3) The label states, "Use recommended water volumes and apply at optimal temperatures..." (p. 7, 2nd bullet, each label). I'm curious as to where I would find the recommended water volumes listed?

Please send back highlighted and clean versions of the corrected labels so that we can finish the label amendment. I tried calling this morning to make my introduction a little more personable, but didn't reach you at your desk. If you have any questions, please feel free to contact me via phone or email.

Thank you,

Deanna (Dee) Colby, Ph.D.
Entomologist, EPA
Invertebrate & Vertebrate Branch 3
Registration Division
703-347-8657

From: Flanery Matt USGR <matt.flanery@syngenta.com>
Sent: Wednesday, April 13, 2016 5:34 PM
To: Colby, Deanna
Cc: McCain Patrick USGR
Subject: RE: 100-1559 amendment 4-12-16
Attachments: 00100-01559.20160310B.THX-MXM-FLD-TBZ-SDX-AMEND-B-MAR16-CL.PDF;
00100-01559.20160310B.THX-MXM-FLD-TBZ-SDX-AMEND-B-MAR16-HI.PDF

Hi Dee,

I am sorry for not getting back to you in a timely manner.

Please find below my answers (in blue) to your questions:

- 1) The last stamped label on file has a (Master label) and a (Non-detachable Container label). The labels included with the amendment application have (Master label) as a heading for both and no (Non-detachable Container label). If this is in error, please correct the headings to match the label on file.

The Non-detachable Container label is not a necessary part of the Master label. We previously included it in our seed treatment labels. The thought was that it was easier to prepare the actual label that goes on pesticide containers with the Non-detachable Container label already prepared and included in the Master Label. However, over time we found repeated errors and discrepancies in revisions made to the 'main' Master label that were inadvertently not carried over to the Non-detachable Container label. This problem is not easily overcome as once the Master label is stamped, we can't go back and fix errors and discrepancies between the 'main' Master label and the Non-detachable Container label without going back in for another amendment. Therefore, we decided to remove Non-detachable Container labels from the Master labels going forward in order to eliminate the possibility of errors and discrepancies between the 'main' master label and the Non-detachable Container label.

The two labels included with the amendment application are the 'Clean' and 'Highlighted' versions of the same Master label, with the Non-detachable Container label removed from both. The highlighted version shows the revisions that were made to the currently approved stamped Master label, while the clean version shows the label as it will appear if all revisions are implemented. The highlighted version should show the Non-detachable Container label as 'crossed-out' and highlighted as a revision. The fact that the highlighted version does not show the removal of the Non-detachable Container label is a mistake on our part. I am sorry for the omission and the confusion. The attached newly revised highlighted version shows this deletion.

- 2) Venus would like you to change 'recommended' doses to 'specified' doses (p. 7, 1st bullet, each label). We agree. Please find attached revised clean and highlighted versions of the label.

- 3) The label states, "Use recommended water volumes and apply at optimal temperatures..." (p. 7, 2nd bullet, each label). I'm curious as to where I would find the recommended water volumes listed?

The recommended water volumes and optimal temperatures for the seed treatment slurry depend on multiple parameters including the seed treatment equipment used, seed type, and pesticide product used. The recommended water volumes for the treatment slurry may be found in the specs for seed treatment equipment, or in recommendations varying by seed type and pesticide product sent from pesticide manufacturers to seed treaters. Syngenta has a 'Seedcare Institute' that works on developing proper

If you have any other questions or concerns, please feel free to ask. Thanks,
-Matt

From: McCain Patrick USGR
Sent: Tuesday, April 12, 2016 4:38 PM
To: Colby, Deanna; Flanery Matt USGR
Subject: RE: 100-1559 amendment 4-12-16

Thanks Dee,

Matt is currently in a training session but will be back in the office Thursday, April 14th. I expect he will be able to respond to your questions shortly thereafter. I hope that is OK. If not, please let us know and we will make alternative arrangements to respond more quickly.

Thanks,
Pat

From: Colby, Deanna [<mailto:colby.deanna@epa.gov>]
Sent: Tuesday, April 12, 2016 7:48 AM
To: McCain Patrick USGR; Flanery Matt USGR
Subject: RE: 100-1559 amendment 4-12-16

Good Morning,

I was looking back through my correspondence from last week and wanted to touch base with you again. Items 1 & 2 in my original email address minor adjustments to label wording, and the third item was a question I had after looking through the label...just for my own knowledge. Again, if you have any questions, please feel free to contact me via phone or email.

Thanks,

Dee

From: McCain Patrick USGR [<mailto:patrick.mccain@syngenta.com>]
Sent: Wednesday, April 06, 2016 11:07 AM
To: Flanery Matt USGR <matt.flanery@syngenta.com>; Colby, Deanna <colby.deanna@epa.gov>
Subject: FW: 100-1559 amendment 4-6-16

Hi Dee,

I look forward to working with you. I am forwarding your email to my regulatory colleague, Matt Flanery, as he is the lead for this action.

Matt,

Please review Dee's feedback below and make the requested changes to the label, as appropriate.

Thanks,
Pat

From: Colby, Deanna [<mailto:colby.deanna@epa.gov>]
Sent: Wednesday, April 06, 2016 10:26 AM
To: McCain Patrick USGR
Subject: 100-1559 amendment

Good Morning Mr. McCain,

Venus wanted me to introduce myself. I'm an entomologist working on Venus and Mark Suarez's teams in RD. I was looking over your label amendment for EPA Reg. #100-1559 and had a couple of minor corrections (per Venus) and a question for you.

- 1) The last stamped label on file has a (Master label) and a (Non-detachable Container label). The labels included with the amendment application have (Master label) as a heading for both and no (Non-detachable Container label). If this is in error, please correct the headings to match the label on file.
- 2) Venus would like you to change 'recommended' doses to 'specified' doses (p. 7, 1st bullet, each label).
- 3) The label states, "Use recommended water volumes and apply at optimal temperatures..." (p. 7, 2nd bullet, each label). I'm curious as to where I would find the recommended water volumes listed?

Please send back highlighted and clean versions of the corrected labels so that we can finish the label amendment. I tried calling this morning to make my introduction a little more personable, but didn't reach you at your desk. If you have any questions, please feel free to contact me via phone or email.

Thank you,

Deanna (Dee) Colby, Ph.D.
Entomologist, EPA
Invertebrate & Vertebrate Branch 3
Registration Division
703-347-8657

This message may contain confidential information. If you are not the designated recipient, please notify the sender immediately, and delete the original and any copies. Any use of the message by you is prohibited.

This message may contain confidential information. If you are not the designated recipient, please notify the sender immediately, and delete the original and any copies. Any use of the message by you is prohibited.

FAST-TRACK AMENDMENTS – Completeness Screening Checklist

Expert's In-Processing Signature: E. Hempton

Date: 3-18-16

PM #: 1

EPA Reg. Number: <u>100-1559</u>		EPA Receipt Date: <u>3/11/16</u>		
	Checklist Item	Yes	No	N/A
1	Application Form (EPA Form 8570-1) - signed?	✓		
2	Confidential Statement of Formula (EPA Form 8570-29) - signed?			✓
3	Certification with Respect to Citation of Data (EPA Form 8570-34) - signed?			✓
4	Formulator's Exemption Statement (EPA Form 8570-27) - signed?			✓
5	Data Matrix (EPA Form 8570-35) [Applicable for adding me-too uses] - signed?			✓
	a) Selective Method?			
	b) Cite-All Method?			
	c) Public copy of Matrix provided? See PR Notice 98-5			
6	Is Label included? (5 copies)	✓		
	a) . Electronic Label submitted?			
<p>Comments: <i>Documentum</i></p> <p><i>Dec - see Toolbox you have questions.</i></p> <p><i>515-700</i></p>				

S: 982805 Milestone Email: bita.emrani@syngenta.com

Regulatory Type: Product Registration Section 3

Re submission: ☐ Yes ☒ No

Application Type: Amendment

Fee For Service: ☐ Yes ☒ No

Billable: ☐ Yes ☒ No

Company: 100 SYNGENTA CROP PROTECTION LLC

V

Print Letter

Enter More Information

Tracking

Risk Manager: Registration Division Risk Management Team 1

Product #: 100-1559 Product Name: THX/MXWFLD/TBZ/SDX FS

Override#

Me Too

Section 3

Me Too Product

Name

Application Date: 11-Mar-2016

OPP Rec'd Date: 11-Mar-2016

Front End Date: 14-Mar-2016

Risk Manager Send Date: 15-Mar-2016

FFS Due Date:

Negotiated Due Date:

OPP Target Date:

Fast Track ☐

New Ingredient ☐

Receipt Description:

Portal submission # 10469. Label amendment.

Receipt Content

Electronic Label

View/Edit

Form A ☐

Signature Date

Form B ☐

Signature Date



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

March 15, 2016

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

DR. JOHN ABBOTT
SYNGENTA CROP PROTECTION, LLC
410 SWING ROAD, PO Box 18300
GREENSBORO, NC 27419-8300

PRODUCT NAME: THX/MXM/FLD/TBZ/SDX FS
COMPANY NAME: SYNGENTA CROP PROTECTION, LLC
OPP IDENTIFICATION NUMBER:
EPA FILE SYMBOL: 100-1559
EPA RECEIPT DATE: 03/11/16

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Registration Division, Risk Management Team 1, at (703) 308-8045.

Sincerely,

A handwritten signature in black ink, appearing to be "J. [unclear]", written over a horizontal line.

Front End Processing Staff
Information Services Branch
Information Technology & Resources Management Division



Fee for Service

{9828051~

This package includes the following

- ☐ New Registration
- ☒ Amendment

☐ Studies? ☐ Fee Waiver?

☐ volpay % Reduction: ____

for Division

- ☐ AD
- ☐ BPPD
- ☒ RD

Risk Mgr. 1

Receipt No.

S-

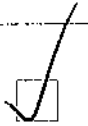
982805

EPA File Symbol/Reg. No.

100-1559

Pin-Punch Date:

3/11/2016



This item is NOT subject to FFS action.

Action Code:

Requested:

Granted:

Amount Due: \$ ____

Parent/Child Decisions:

☒ Inert Cleared for Intended Use



Uncleared Inert in Product

Reviewer: H. GARVIE

Date: 3/15/16

Remarks:

DOCUMENTUM



Patrick McCain
Senior Regulatory Product Manager
Regulatory Affairs, Seed Care
(336) 632-7317 (phone)
(336) 632-5688 (fax)
patrick.mccain@syngenta.com

Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, NC 27419-8300
www.syngenta.com

March 11, 2016

Document Processing Desk (ESUB) (AMEND)
Office of Pesticide Programs (7505P)
U.S. Environmental Protection Agency
One Potomac Yard
2777 South Crystal Drive – Room S-4900
Arlington, VA 22202

Attention: Ms. Venus Eagle – PM Team 01, Invertebrate-Vertebrate Branch 3, RD

Subject: THX/MXM/FLD/TBZ/SDX FS
EPA Reg. No. 100-1559
Amendment: Fast-Track

Dear Ms. Eagle:

Syngenta Crop Protection, LLC respectfully requests amended labeling for the subject product, to include the following minor revisions:

- Added rate expressed as 'fl oz per 140,000 seeds' to THX/MXM/FLD/TBZ/SDX FS Rate Table for ease of use by soybean growers and consistency with current soybean seed treatment labels. The rates have not changed; they are simply expressed in different units.
- Revised abbreviation for grams from 'gm' to 'g' in THX/MXM/FLD/TBZ/SDX FS Rate Table to be consistent with current seed treatment labels

No other revisions have been made to the currently approved master label. Please refer to the enclosed highlighted version of the proposed label for more details.

Fees for Service

Syngenta believes that consideration of this amendment qualifies for expedited processing under section 3(c)(3)(B)(i)(I) of FIFRA (Fast-Track), and, therefore, does not require a fee under the Pesticide Registration Improvement Act (PRIA).

Please find enclosed:

- Application for Pesticide Registration, EPA Form 8570-1
- Proposed Master Label, clean and highlighted PDF versions

If you have any questions or comments regarding this submission, please contact me at 336-632-7317.

Sincerely,

Patrick McCain
Senior Regulatory Product Manager

Enclosures

DOCUMENTUM

Please read instructions on reverse before completing form.

United States Environmental Protection Agency Washington, DC 20460		<input type="checkbox"/> Registration <input checked="" type="checkbox"/> Amendment <input type="checkbox"/> Other	OPP Identifier Number
Application for Pesticide - Section I			
1. Company/Product Number 100-1559		2. EPA Product Manager Ms. Venus Eagle	
4. Company/Product (Name) THX/MXM/FLD/TBZ/SDX FS		3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted	
5. Name and Address of Applicant (Include ZIP Code) Syngenta Crop Protection, LLC P. O. Box 18300 Greensboro, NC 27419 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	
Section - II			
<input checked="" type="checkbox"/> Amendment - Explain below. <input type="checkbox"/> Final printed labels in response to Agency letter dated _____ <input type="checkbox"/> Resubmission in response to Agency letter dated _____ <input type="checkbox"/> "Me Too" Application. <input type="checkbox"/> Notification - Explain below. <input type="checkbox"/> Other - Explain below.			
Explanation: Use additional page(s) if necessary. (For Section I and Section II.). Syngenta Crop Protection, LLC respectfully submits a label amendment for THX/MXM/FLD/TBZ/SDX FS (EPA Reg. No. 100-1559). Minor revisions to rate table including: added rate expressed as fl oz per 140,000 seeds for ease of use by soybean growers and changed abbreviation for grams from 'gm' to 'g'. Syngenta proposes this submission fulfills the requirements for a Fast-Track Amendment under section 3(c)(3)(B)(i)(I) of FIFRA.			
Section - III			
1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
*Certification must be submitted		If "Yes" No. per If "Yes" No. per Unit Packaging wgt. Container Unit Packaging wgt. container	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 2.5 gallons, 15 gallons, bulk	
5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product		6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other _____ Pressure Sensitive	
Section - IV			
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)			
Name Patrick McCain		Title Sr. Regulatory Product Manager - Seedcare	
		Telephone No. (Include Area Code) 336-632-7317	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.			6. Date Application Received (Stamped)
2. Signature 		3. Title Sr. Regulatory Product Manager - Seedcare	
4. Typed Name Patrick McCain		5. Date March 11, 2016	

EPA Form 8570-1 (Rev. 8-94) Previous editions are obsolete.

DOCUMENTUM

PROCESSING REQUEST

Reg # 100-1559

Decision # 495610

Description: new product

Electronic Label & Letter
(see PPLS):

OR

Non Electronic
Label & Letter
(Scanning required):

☒ Dated: 10/19/2015

☐ Dated:

Only one label type should be selected

Other Materials Sent (see jacket):

☒ New CSF(s) Dated: 10/22/2014

☐ Other:

File this coversheet and attached materials in the jacket. It must be well organized and clipped together, NOT STAPLED. Then give the jacket with the coversheet and materials to staff in the Information Services Center (ISC) (Room S-4900). If a jacket is full or only available as an image, please file materials in a new jacket and bring it down to the (ISC). For further information please call 703-605-0716.

Reviewer: Jacquelyn Marchese

Division: RD

Phone: 347-0559

Date: 10/26/2015

6/15/15

Note to File re Syngenta:

On April 2, 2015, EPA sent all neonicotinoid registrants a letter that explained how the Agency intends to treat applications for new outdoor uses of products containing imidacloprid, dinotefuran, clothianidin or thiamethoxam. In addition, EPA notified Syngenta that it would not be granting several applications for new outdoor uses of thiamethoxam.

Subsequently, on April 22, EPA notified Syngenta that it would not at this time be granting an application for a new seed treatment products that presented new combinations of active ingredients including thiamethoxam. The letter provided several options Syngenta could pursue in regards to the application. While the application was not granted, it was also not denied and remains pending. In response to the not-grant letter, Syngenta met with the Agency on multiple occasions during May and June, including a meeting with Jim Jones and the Administrator on June 4, 2015.

After further consideration, the Agency has determined that the new combination product does not present a significant increase of exposure to thiamethoxam in comparison with uses already available in the marketplace. The active ingredients in this combination are already registered for these uses with substantially similar directions for use. Therefore, EPA has determined to proceed with the review of these products.

Venus Gagle, PM 01

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460



OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Charles Levey
Federal Team Lead
Regulatory Affairs, Insecticides
Syngenta Crop Protection, LLC
PO Box 18300
Greensboro, NC 27419

APR 22 2015

Subject: Not Grant Letter for pending New Combination seed treatment products containing thiamethoxam.

OPP Decision Numbers: D500042, D500367, D502679, D495610, & D492834

EPA File Symbols: 100-RLAG, 100-RLAU, 100-RLLO, 100-RLLA

Product Names: CruiserMaxx Vibrance Pulses, A21185B,
THX/MXM/FLD/TBZ/SDX FS, CruiserMaxx Vibrance Potato

EPA Receipt Date: July 2014 - February 2015 submissions

EPA Company Number: 100

Company Name: Syngenta Crop Protection

Dear Mr. Levey:

Our records indicate that the decision review period for EPA to make a determination pursuant to section 33 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), also known as the Pesticide Registration Improvement Act (PRIA), as amended, regarding the above referenced applications have dates ending between June 15, 2015 and January 20, 2016.

The Agency, in meeting its obligation to make a determination within the PRIA decision review period, is unable to find that your application meets the standard for registration under FIFRA and, therefore, has determined that your application cannot be granted at this time. As you are aware, thiamethoxam is currently undergoing Registration Review where many of the overarching data needs (required in the thiamethoxam Data Call-In; GDCI-060109-1309) and risk uncertainties for the chemical are being addressed. In the absence of these new data, EPA does not believe it has sufficient information to support a determination that the new proposed products will meet the FIFRA registration standard. EPA believes that until the data on pollinator health have been received and appropriate risk assessments completed, it is unlikely to be in a position to determine that such uses would avoid "unreasonable adverse effects on the environment" as required under FIFRA. The forthcoming data and assessments will be used to inform and strengthen the Agency's regulatory position on thiamethoxam. Thus the EPA is

unable at this time to determine that these new outdoor use patterns meet the FIFRA "will not cause unreasonable adverse effects" standard required for registration.

Although this concludes EPA's PRIA review of your applications, this determination is not a denial of your application pursuant to section 3(c)(6) of FIFRA. You have the following three options.

JUL 07 2015

1. **Do nothing.** If you do not respond to this letter, the Agency will administratively withdraw your application on

pursuant to 40 CFR § 152.105. Since a fee was paid, the Agency will provide any applicable refund as soon as practicable. Once the application is withdrawn, if you decide to pursue this action again, you will need to submit a new application, including either the appropriate fee or at least 25% of the fee and a request for a waiver or reduction for the remainder of the fee.

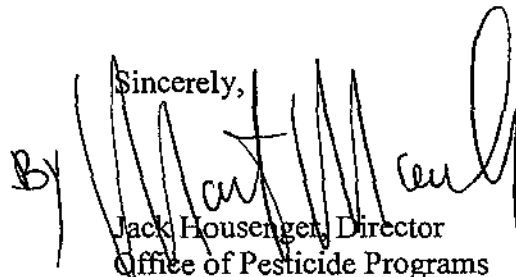
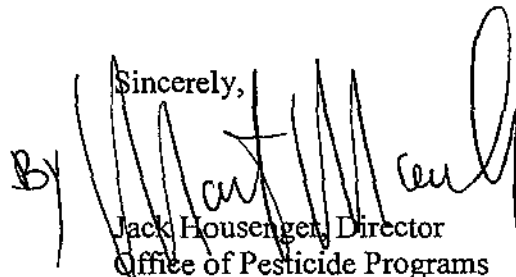
2. **Withdraw the application.** You may withdraw your application. Since a fee was paid, the Agency will provide any applicable refund as soon as practicable. Once the application is withdrawn, if you decide to pursue this action again, you will need to submit a new application, including either the appropriate fee or at least 25% of the fee and a request for a waiver or reduction for the remainder of the fee.

3. **Request a denial.** Because this determination is not a denial under section 3(c)(6) of FIFRA, you may request that EPA issue such a denial by responding to the Agency prior to

JUL 07 2015

The Agency may then initiate a denial process, based upon the record before the Agency as of the date of this letter, as described in section 3(c)(6) of FIFRA and 40 CFR § 152.118. The process includes publication of a notice of denial in the Federal Register and a possible public hearing.

If you have questions concerning this letter, please contact Meredith Laws, Chief, Invertebrate & Vertebrate Branch 3 (IVB3) at (703) 308-7038 or laws.meredith@epa.gov; or Venus Eagle, Product Manager 01, IVB3 at (703) 308-8045 or eagle.venus@epa.gov.

Sincerely,

By  Jack Housenger, Director
Office of Pesticide Programs



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

100-1559

Date of Issuance:

10/19/15

NOTICE OF PESTICIDE:

☒ Registration
☐ Reregistration
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

THX/MXM/FLD/TBZ/SDX FS

Name and Address of Registrant (include ZIP Code):

Patrick McCain
Syngenta Regulatory Product Manager
P.O. Box 18300
Greensboro, NC 27419

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Venus Eagle, Product Manager 01
Invertebrate-Vertebrate Branch 3, Registration Division (7505P)

Date:

10/19/15

2. You are required to comply with the data requirements described in the DCI Order identified below:

- Thiamethoxam GDCI-060109-1309
- Fludioxonil GDCI-071503-1243
- Thiabendazole GDCI-060101-1453

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://www.epa.gov/oppsrrd1/contacts_prd.htm

3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 100-1559."
4. Submit one copy of the final printed label for the record before you release the product for shipment.

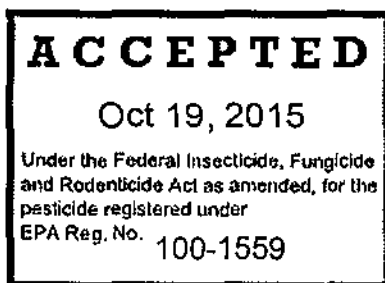
Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 10/22/2014
- Alternate CSF 1 dated 10/22/2014

If you have any questions, please contact Jacquelyn Marchese by phone at 703-347-0559, or via email at marchese.jacquelyn@epa.gov.

Enclosure: Stamped label



(Master label)

GROUP 4A INSECTICIDE

GROUP 1 4 7 12 FUNGICIDES

THX/MXM/FLD/TBZ/SDX FS

Insecticide with Fungicides

A seed treatment product for protection against damage from listed insects, seed-borne diseases, and seedling diseases on soybean

Active Ingredients:

Thiamethoxam ¹	22.40%
Mefenoxam ²	3.35%
Thiabendazole ³	2.24%
Fludioxonil ⁴	1.12%
Sedaxane ⁵	1.12%
Other Ingredients:	69.77%
Total:	100.00%

¹CAS No. 153719-23-4

²CAS No. 70630-17-0 and CAS No. 69516-34-3

³CAS No. 148-79-8

⁴CAS No. 131341-86-1

⁵CAS No. 874967-67-6

One gallon of THX/MXM/FLD/TBZ/SDX FS contains 2.16 lb thiamethoxam, 0.32 lb mefenoxam, 0.22 Lb thiabendazole, 0.11 lb fludioxonil and 0.11 lb sedaxane.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use in booklet [on label].

EPA Reg. No. 100-XXXX

EPA Est. XXXXX

SCP XXXX MAS

Net Contents

FIRST AID	
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves—: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to wildlife, freshwater and estuarine/marine fish and highly toxic to aquatic invertebrates. Runoff may be hazardous to aquatic organisms in neighboring areas. Exposed treated seed may be hazardous to wildlife. Cover seed spilled during loading. Do not contaminate water when disposing of equipment washwater or rinsate.

Pollinator Precautions

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

Groundwater Advisory

Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Mefenoxam is known to leach through soil into ground water under certain conditions as a result of label use. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Physical and Chemical Hazards

Do not use, pour, spill or store near heat or open flame. Do not store near or use with oxidizing agents.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall Syngenta be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For use in commercial seed treatment facilities. Use is also permitted as an end-use seed treatment on agricultural establishments at planting, or immediately before planting, as specified in the Specific Crop Use Directions. This product is to be used in liquid or slurry treaters only.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 hours. Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves: barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, polyvinyl chloride (PVC) ≥14 mils, or Viton® ≥14 mils
- Shoes plus socks

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR INSECT AND/OR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

Treatment of highly mechanically scarred or damaged seed or seed known to be of low vigor and poor quality may result in reduced germination and/or reduction of seed and seedling vigor. Treat a quantity of seed using equipment similar to that planned for treating the total seed lot. Prior to treatment, conduct germination tests on a portion of seed before committing the total seed lot to a selected seed treatment.

Due to seed quality, crop or variety sensitivity, and seed storage conditions beyond the control of Syngenta, no claims are made to guarantee the germination of seed or propagating material for all crop seed when treated with THX/MXM/FLD/TBZ/SDX FS.

USE INFORMATION

THX/MXM/FLD/TBZ/SDX FS is a seed treatment product containing the active ingredients thiamethoxam (insecticide) and fludioxonil, thiabendazole, mefenoxam and sedaxane (fungicides). THX/MXM/FLD/TBZ/SDX FS protects against damage from listed early-season insects, soil-borne and seed-borne diseases of soybeans.

Thiamethoxam is a systemic seed treatment insecticide belonging to the neonicotinoid class of chemistry. Thiamethoxam protects against listed chewing and sucking insects through contact and ingestion.

Mefenoxam fungicide is active against *Pythium*, *Phytophthora* and systemic downy mildew.

Thiabendazole fungicide is active for protection against phomopsis spp. to improve germination and early season seedling health. Thiabendazole also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Fludioxonil fungicide is active against *Fusarium* and *Rhizoctonia*, and suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

Sedaxane fungicide is active against seed decay, seedling blight and damping-off caused by *Rhizoctonia* species.

RESISTANCE MANAGEMENT

GROUP 4A INSECTICIDE

THX/MXM/FLD/TBZ/SDX FS contains thiamethoxam, a Group 4A insecticide. Thiamethoxam is a systemic insecticide belonging to the neonicotinoid class of chemistry which includes nicotinic acetylcholine receptor (nAChR) agonists.

Insect populations may contain individuals naturally resistant to Group 4A insecticides and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, use sound resistance management strategies established for the crop and use area.

Base seed treatment on an integrated pest management program that includes field sanitation, historical information related to pesticide use, careful selection of pest-tolerant crop varieties, scouting, and management practices which optimize populations of natural enemies of insect pests such as within-field refugia (untreated areas). Sound management programs also consider cultural and biological control practices.

In order to maintain susceptibility to this class of chemistry:

- Use products at their full, recommended doses.
- Use appropriate, well-maintained equipment. Use recommended water volumes and apply at optimal temperatures in order to obtain optimal treatment.
- When rate ranges are given, use the higher rate within the listed rate range when insect pressure is expected to be high.
- Avoid using a single active ingredient or mode of action (same insecticide group) exclusively for season long control of insect species with more than one generation per crop season.
- For insect species with successive or overlapping generations, use a treatment window approach. A treatment window is a period of time defined by the stage of crop development and the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, single or consecutive applications may be made using seed, in-furrow, or foliar treatments unless otherwise excluded by product labels. Do not exceed the maximum amount of this insecticide's mode of action allowed per growing season.
- Following a treatment window of this insecticide's mode of action, rotate to a treatment window of effective products with a different mode of action before making additional applications of this insecticide.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for the crop and use area.

GROUP	1	4	7	12	FUNGICIDES
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THX/MXM/FLD/TBZ/SDX FS contains mefenoxam, a Group 4 fungicide; thiabendazole, a Group 1 fungicide, fludioxonil, a Group 12 fungicide; and sedaxane, a Group 7 fungicide. Thiabendazole belongs to the methyl-benzimidazole carbamate class of chemistry which disrupts β -tubulin assembly in mitosis. Mefenoxam belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Sedaxane is a succinate dehydrogenase inhibitor (SDHI) and belongs to the carboxamide class of chemistry which disrupts cellular respiration and energy generation. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with a MAP/histidine protein kinase in osmotic signal transduction.

Fungal populations may contain individuals naturally resistant to Group 1, 4, 7, and 12 fungicides, and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies such as alternation with fungicides with a different mode of action and/or tank mixes established for the crop and use area.

Use should be based on an IPM program that includes field sanitation, scouting, historical information related to pesticide use, and crop rotation. The IPM program should also consider cultural, biological, and other chemical control practices.

Syngenta encourages responsible product stewardship to ensure effective long term control of the fungal diseases on this label.

For additional information on Insecticide or Fungicide Resistance Management:

- Contact Syngenta representatives at 1-800-334-9481
- Contact your local Cooperative Extension Service specialist, pest control advisor, or certified crop advisor
- Visit the Insecticide Resistance Action Committee (IRAC) on the web at: <http://www.irac-online.org> or the Fungicide Resistance Action Committee (FRAC) on the web at: <http://www.frac.info>

CROP ROTATIONAL RESTRICTIONS

In the event of a crop failure or harvest of a crop grown from THX/MXM/FLD/TBZ/SDX FS treated seed, the field may be replanted according to the following schedule:

Immediate Plantback	Minimum 30-Day Plantback Interval	Minimum 120-Day Plantback Interval
Cereal Grains: Barley, Oats, Rye, Triticale, and Wheat	Alfalfa	All Other Crops
Peas, Dried Shelled: Chickpea (Garbanzo Bean), Field Pea, Lentil, and Pigeon Pea	Brassica (Cole) Leafy Vegetables	
Soybean	Cereal Grains (buckwheat, corn, pearl millet, proso, popcorn, rice (dry-seeded), sorghum, teosinite, wild rice	
	Cotton	
	Cucurbit Vegetables	
	Fruiting Vegetables	
	Globe Artichoke	
	Leafy Vegetables	
	Legume Vegetables (Succulent or Dried)	
	Mint: Peppermint and Spearmint	
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower	
	Peanut	
	Root Vegetables	
	Strawberry	
	Sunflower	
	Tobacco	

For any other crop, the minimum plant back interval is 120 days from the date the THX/MXM/FLD/TBZ/SDX FS treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.

MIXING PROCEDURES

Important: Always re-circulate THX/MXM/FLD/TBZ/SDX FS thoroughly before using.

Consult the manufacturer of the application equipment you plan to use for suitability for this application and for instructions on operation and calibration of the equipment. Follow the manufacturer application instructions for the seed treatment equipment being used.

Use an EPA approved dye/colorant that imparts an unnatural color to the seed as required in 40CFR 153.155(c).

Apply THX/MXM/FLD/TBZ/SDX FS as a water-based slurry utilizing standard slurry or direct inject seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease control. Thoroughly mix the specified amount of THX/MXM/FLD/TBZ/SDX FS into the required amount of water or liquid inoculant for the slurry treater and dilution rate to be used. For direct product inject systems, add the required amount of water or liquid inoculant during application.

Certain crops require addition of inoculants when the seed is treated or planted. THX/MXM/FLD/TBZ/SDX FS is compatible with several liquid inoculant products. Consult the maker of the inoculant product and a Syngenta representative for directions before applying THX/MXM/FLD/TBZ/SDX FS with inoculants.

The total application volume must be sufficient to provide desired level of coverage. Dilution is typically done with water or liquid inoculants. The minimum slurry volume to achieve minimum adequate coverage is 4.0 fluid ounces per 100 pounds of seed assuming an average seed size of 3,000 seeds per pound (slurry volume will vary depending on seed size). More diluent may be required to obtain complete coverage.

Continuous agitation or mixing of the slurry mixture is necessary to prevent settling out of the solution.

Allow seed to dry before bagging or reprocessing directly after treating operation.

Follow planter manufacturer specifications for use of talc or other hopper box additives at planting. Seed must be completely dry before adding to planter.

SEED BAG LABEL REQUIREMENTS

The Federal Seed Act requires that bags containing treated seeds shall be labeled with the following statements:

- This seed has been treated with thiamethoxam insecticide and fludioxonil, mefenoxam, thiabendazole and sedaxane fungicides.
- Do not use for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with THX/MXM/FLD/TBZ/SDX FS:

- **Ground Water Advisory:**
Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow. Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.
- **Pollinator Precautions:**
Thiamethoxam is highly toxic to bees, and effects are possible as a result of exposure to translocated residues in blooming crops.
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticide remain in the ethanol by-products that are used in agronomic practice.
- Do not allow children, pets, or livestock to have access to treated seed.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Dispose of all excess treated seed. Leftover treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements.
- Do not contaminate water bodies when disposing of planting equipment wash waters.
- Dispose of seed packaging in accordance with local requirements.
- Do not graze or feed livestock on treated areas for 45 days after planting seed treated with THX/MXM/FLD/TBZ/SDX FS.

- In the event of a crop failure or harvest of a crop grown from THX/MXM/FLD/TBZ/SDX FS treated seed, the field may be replanted according to the following schedule.

Immediate Plantback	Minimum 30-Day Plantback Interval	Minimum 120-Day Plantback Interval
Cereal Grains: Barley, Oats, Rye, Triticale, and Wheat	Alfalfa	All Other Crops
Peas, Dried Shelled: Chickpea (Garbanzo Bean), Field Pea, Lentil, and Pigeon Pea	Brassica (Cole) Leafy Vegetables	
Soybean	Cereal Grains (buckwheat, corn, pearl millet, proso, popcorn, rice (dry-seeded), sorghum, teosinte, wild rice	
	Cotton	
	Cucurbit Vegetables	
	Fruiting Vegetables	
	Globe Artichoke	
	Leafy Vegetables	
	Legume Vegetables (Succulent or Dried)	
	Mint: Peppermint and Spearmint	
	Oilseeds: Borage, Crambe, Flax Seed, Mustard Seed, and Safflower	
	Peanut	
	Root Vegetables	
	Strawberry	
	Sunflower	
	Tobacco	

- For any other crop, the minimum plant back interval is 120 days from the date the THX/MXM/FLD/TBZ/SDX FS treated seed was planted. A cover crop other than the crops listed above that is planted for erosion control or soil improvement may be planted sooner than the 120 day interval; however, the crop may not be grazed or harvested for food or feed.
- Do not use at a rate that will result in more than 0.083 lb thiamethoxam (37.8 grams ai/A) per acre, 0.004 lb fludioxonil (2.0 grams ai/A) per acre and 0.013 lb mefenoxam (5.7 grams ai/A) per acre per calendar year as a seed treatment application.
- This seed has been treated with 0.0756 mg ai thiamethoxam, 0.0113 mg mefenoxam, and 0.0038 mg fludioxonil per seed.
- Do not apply a neonicotinoid insecticide within 45 days of planting seed treated with THX/MXM/FLD/TBZ/SDX.

CROP USE DIRECTIONS

When applied according to the **THX/MXM/FLD/TBZ/SDX FS RATE TABLE**, THX/MXM/FLD/TBZ/SDX FS provides early season protection against injury by aphids, bean leaf beetle, grape colaspis, leaf miners, leaf hoppers, Mexican bean beetle, seed corn maggot, three-cornered alfalfa hopper, thrips, white grubs, and wireworm.

THX/MXM/FLD/TBZ/SDX FS provides protection against damping-off and seed borne rots due to *Pythium*, *Phytophthora*, *Fusarium*, *Rhizoctonia* species and early season *Phytophthora* root rot. THX/MXM/FLD/TBZ/SDX FS also suppresses seed-borne *Sclerotinia* and *Phomopsis* species.

THX/MXM/FLD/TBZ/SDX FS Rate Table¹

Crop	Rate of THX/MXM/FLD/TBZ/SDX FS		
	fl oz per 100 lb seed	grams ai per 100 kg seed	mg ai per seed
Soybean, including soybean, vegetable	2.96 fl oz	Thiamethoxam 50 gm Mefenoxam 7.5 gm Thiabendazole 5.0 gm Fludioxonil 2.5 gm Sedaxane 2.5 gm	Total = 0.102

¹The mg ai per seed and fl oz THX/MXM/FLD/TBZ/SDX FS per 100 lb seed rates are based on 3,000 seeds per pound.

STORED GRAIN PROTECTION

When treated according to the directions for post-planting protection against listed pests, THX/MXM/FLD/TBZ/SDX FS will also provide protection during post treatment storage of the soybean seed against damage from the following stored grain insects: Indian Meal Moth (*Plodia interpunctella*), Rice Weevil (*Sitophilus oryza*), Red Flour Beetle (*Tribolium castaneum*), and Lesser Grain Borer (*Rhizopertha dominica*).

If the soybean seed to be treated has existing infestations of stored grain insects, fumigate the seed with a registered product approved for such use prior to treating with THX/MXM/FLD/TBZ/SDX FS and bagging.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, or disposal, or cleaning of equipment.

Pesticide Storage

Store in a cool, dry place. Storage for extended periods above 90°F is not recommended.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling [less than or equal to 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more

times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

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Manufactured for:
Syngenta Crop Protection, LLC
P. O. Box 18300
Greensboro, North Carolina 27419-8300

(Non-detachable Container Label)

GROUP 4A INSECTICIDE

GROUP 1 4 7 12 FUNGICIDES

THX/MXM/FLD/TBZ/SDX FS

Insecticide with Fungicides

A seed treatment product for protection against damage from listed insects, seed-borne diseases, and seedling diseases on soybean

Active Ingredients:

Thiamethoxam ¹	22.40%
Mefenoxam ²	3.35%
Thiabendazole ³	2.24%
Fludioxonil ⁴	1.12%
Sedaxane ⁵	1.12%
Other Ingredients:	69.77%
Total:	100.00%

¹CAS No. 153719-23-4

²CAS No. 70630-17-0 and CAS No. 69516-34-3

³CAS No. 148-79-8

⁴CAS No. 131341-86-1

⁵CAS No. 874967-67-6

One gallon of THX/MXM/FLD/TBZ/SDX FS contains 2.16 lb thiamethoxam, 0.32 lb mefenoxam, 0.22 Lb thiabendazole, 0.11 lb fludioxonil and 0.11 lb sedaxane.

See additional precautionary statements and directions for use in booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-XXXX

EPA Est. XXXXX

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Manufactured for :
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP XXXX MAS

Net Contents

KEEP OUT OF REACH OF CHILDREN.

CAUTION

FIRST AID	
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Environmental Hazards

This product is toxic to wildlife, freshwater and estuarine/marine fish and highly toxic to aquatic invertebrates. Runoff may be hazardous to aquatic organisms in neighboring areas. Exposed treated seed may be hazardous to wildlife. Cover seed spilled during loading. Do not contaminate water when disposing of equipment washwater or rinsate.

Pollinator Precautions:

Thiamethoxam is highly toxic to bees exposed to direct treatment, and effects may be possible as a result of exposure to translocated residues in blooming crops.

Groundwater Advisory:

Thiamethoxam has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Mefenoxam is known to leach through soil into ground water under certain conditions as a result of agricultural use. This chemical may leach into the ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Physical and Chemical Hazards

Do not use, pour, spill or store near heat or open flame. Do not store near or use with oxidizing agents.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, or disposal.

Pesticide Storage

Store in a cool, dry place. Storage for extended periods above 90°F is not recommended.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling [less than or equal to 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary

landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons]

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling [greater than 5 gallons]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

